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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,511	03/02/2006	John Robert Owen	P-8053-US	1489
49443 7590 02/03/2011 Pearl Cohen Zedek Latzer, LLP 1500 Broadway 12th Floor New York, NY 10036				
EXAMINER SALZMAN, KOURTNEY R				
ART UNIT		PAPER NUMBER		
1724				
NOTIFICATION DATE		DELIVERY MODE		
02/03/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@pczlaw.com
Arch-USPTO@pczlaw.com

Office Action Summary**Application No.**

10/541,511

Applicant(s)

OWEN ET AL.

Examiner

KOURTNEY R. SALZMAN

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-942)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 3, 2010 has been entered.

Response to Amendment

2. Claim 1 has been amended. Claims 2-4 remain cancelled.
3. Claims 1, 5 and 6 are currently pending and have been fully considered.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
 - a. Please correct the title to make it clear what this is not a method claim but rather a claim to an electrochemical cell.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1, 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

b. Claim 1 is unclear in terms of the material of use in making the first electrode. Is the intent of the claim to require the first electrode to be the testing site or for the electrode to be made of a separate material with sample also present? The problem becomes the interpretation of what is classified as part of the electrochemical cell. During testing, samples are generally added to the electrode surface, and in turn are not considered to be part of the electrode itself. Through the addition of the sample, this is how a change in electrical signal is interpreted. If the sensor samples are present in the cell constantly, the electrocatalytic material would not produce a different result during testing, making an ineffective sensor. Furthermore, if the goal is to determine something regarding the electrocatalyst, the claim is silent as to what characteristic is to be known. The operation of a sensor is to detect something and from the examples, it seems the entire purpose of the cell is detect the changes in the electrochromic material with changing electrolytic behavior, yet this is not conveyed. The preamble suggests the behavior of the electrocatalyst is tested, yet the result is not monitored in the electrocatalyst. It is unclear what the purpose of the sensor is other than to change the color of the electrochromic material, making a quantifiable result, something general output by a valid sensor, when detection is desired ineffective as a sensor. In this action, the presence of the sample is deemed to be added during testing, is not a permanent part of the sensor and is part of the functionality of the sensor, not the structure of the sensor itself. Please make clear the result which is taken from the cell other than a color

change and what characteristic is even measured regarding the electrocatalyst behavior. The "result" of this sensor is so controlled, due to all parts being present upon assembly and the control of the potential during testing with the addition of no sample, its functionality and use are deemed indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by WACHSMAN et al (US PG PUB 2003/0066519).

Regarding claim 1, WACHSMAN et al teaches a first electrode (14), counter-electrode (16) with electrolyte between (18). The broadest reasonable interpretation of the surface of the first electrode as shown in the figure is for a surface to have an unlimited or infinite plurality of regions for testing as anywhere on the surface where at least one molecule can attach is deemed sufficient to fulfill the language of the claim as a region. As discussed above, the presence of the sample is deemed to not be part of the structure of the cell. However, in the interest of compact prosecution, WACHSMAN et al teaches the addition of a platinum metal layer 15 which can be interpreted as an electrocatalyst as page 8 in example 1 (page 7, lines 18-24 makes the carbon layer unnecessary). Since the surface can have an infinite number of testing regions, a plurality of samples

is also present with the addition of the catalytic layer. Paragraph 64 details the use of WO₃, an electrochromic material to be effective as electrode 16. The functionality of the sensor as the electrochromic material as required in the claim is inherent to the function of the sensor itself.

Regarding claim 5, Paragraph 64 details the use of WO₃, an electrochromic material to be effective as electrode 16.

Regarding claim 6, figure 1B and paragraph 76 disclose the use of the reference electrode and potentiometric control.

Response to Arguments

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. Moreover, the use of KUDLA et al is obviated in light of the new interpretation of the claims due to the amendment.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KOURTNEY R. SALZMAN whose telephone number is (571)270-5117. The examiner can normally be reached on Monday to Thursday 6AM - 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nam X Nguyen/
Supervisory Patent Examiner, Art Unit 1753

hrs
1/29/2011